

# PRINTERS & SCANNERS

## FAQ

**Q** I've heard that laser printer toner is carcinogenic. Is this true?

**A** Black toner is made primarily from a combination of plastic and carbon black, along with other materials, such as iron oxide in the case of magnetic toner. Carbon black has been classified by the International Agency for Research on Cancer as being in Group 2B, which is possibly carcinogenic to humans.

The level of exposure to the substance from normal laser printer use, including through changing toner cartridges, is not considered a notable risk. However, carbon black is a mild irritant if it comes into contact with the tongue or eyes, and can be hazardous if inhaled in large quantities due to its fine particulate nature. If you get toner on your skin, it should be washed off immediately using soap and cold water.

To be safe, you can use a normal dust mask and latex gloves when you are changing toner cartridges.

**Kat Orphanides**

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## EPSON Stylus Photo R360

★★★★★

£80 inc VAT

From [www.ebuyer.com](http://www.ebuyer.com)

With a large 3½in colour screen and a wealth of buttons and menu options, Epson's Stylus Photo R360 doesn't look like a typical inkjet. Although it's perfectly capable of running off letters and charts, it is designed to excel at photo printing. Beneath its lid are six of Epson's Claria photo ink cartridges, including light cyan and light magenta inks to produce more subtle shading and colours, while a card reader and PictBridge port allow you to print directly from a digital camera, USB flash drive or a range of popular camera memory card formats, including SD, SDHC, CompactFlash, Memory Stick Pro, Microdrive and xD.

We put the R360 through its paces using our usual range of test documents, but the overall results were disappointing. A draft speed of 12.2 pages per minute (ppm) produced perfectly readable prints, but their pale reddish-brown text would not be suitable for anything but quick reference or proofing. Correspondence-quality text documents suffered from more serious problems and were slow to print at 3.4ppm, with a single page taking 22 seconds. Most of the letters were dark and clear, but occasional lines of text were struck through with inexplicable jagged lines. Our mixed-colour document prints fared better and were printed at a quick 2.3ppm. Colours were accurate, but dark shades were spotted with pale specks. These were also visible on our greyscale prints, and made large areas of black colour appear greyish.

The R360's document printing was flawed, but we couldn't fault the quality of its photos, which are among the best we've seen from a home photo printer. Colour accuracy and shading were perfect, and we couldn't see any dithering or grain, even close up. Skin tones were true to life and even dark, low-contrast images were rendered with clarity and distinction. Photos even had a reflective sheen like those from a professional printer. Print speeds weren't that fast, but six high-quality 6x4in photos emerged in a little over 13 minutes.

To make matters worse, the R360 is expensive to run. Although mono print costs are a reasonable 2.2p per page, a 6.6p colour page combines with that to produce a total page cost of 8.8p. This isn't surprising with six inks to buy, but it makes document printing more costly than other inkjets.

If you're looking for a high-quality photo printer and aren't worried about running costs, the Stylus Photo R360 is an excellent choice. Its photos are astonishingly good, and its large screen and memory card slots allow you to print without being tied to a PC. At £80 this is an excellent buy, as long as document printing isn't a priority.

If documents and photos are of equal importance to you, go for the Best Buy-winning Canon PIXMA iP4300 instead (see 'Also consider...'). Its photos aren't as good as the R360's, but it's a great all-rounder with low running costs.

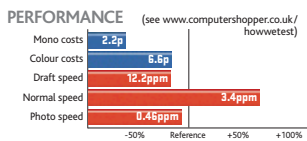
*Kat Orphanides*



### SUMMARY

- ✓ Excellent photo quality
- ✓ Screen and memory card reader
- ✗ Poor document printing

**COLOUR INKJET PRINTER** Six-colour inkjet, 5,760x1,440 dpi maximum resolution, 30ppm mono/30ppm colour maximum speed, USB Hi-Speed and PictBridge interfaces  
PART CODE C11C658021  
DETAILS [www.epson.co.uk](http://www.epson.co.uk)



## Also consider...

### SAMSUNG ML-2510

★★★★★

£65 inc VAT

From [www.ebuyer.com](http://www.ebuyer.com)

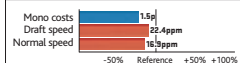


This grey laser printer may look a little drab, but

it's easy to set up and quick to install. Samsung's ML-2510 has a 250-sheet covered input tray and a single-sheet multipurpose feed slot, although it crumples envelopes.

It peaked at 22.7ppm when printing text, which is impressive for such an affordable printer. It's also cheap to run, with a cost per page of around 1.5p, yet produces high-quality text and mono graphics. It's a great compact budget mono laser printer.

**MONO LASER PRINTER** 1,200x600dpi resolution, 24ppm maximum speed, parallel and USB Hi-Speed interfaces  
PART CODE ML-2510  
DETAILS [www.samsung.co.uk](http://www.samsung.co.uk)  
FULL REVIEW Oct 2006



### CANON PIXMA MP520

★★★★★

£77 inc VAT

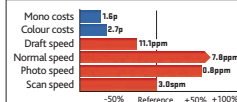
From [www.ameiva.co.uk](http://www.ameiva.co.uk)



The PIXMA MP520

combines an affordable price with quick print speeds and low page costs. Even at draft quality, its text document prints looked great, while its normal-quality prints were laser-sharp. Draft prints were fairly slow, but normal-quality documents printed at 7.8ppm. Photo prints were good, too. The scanner interface doesn't list its top resolution of 1,200x2,400dpi, but you can set this manually. Scans at all resolutions were sharp and accurate.

**COLOUR INKJET MFP** 4,800x1,200dpi print resolution, 30ppm mono/20ppm colour maximum speed, 1,200x2,400dpi scan resolution, USB Hi-Speed, PictBridge USB interfaces  
PART CODE 2178B008AA  
DETAILS [www.canon.co.uk](http://www.canon.co.uk)  
FULL REVIEW Jan 2008



HP

## Scanjet N7710

★★★★★

£580 inc VAT

From [www.europc.co.uk](http://www.europc.co.uk)

Many businesses aspire to a paperless office, but most have found it a daunting goal to realise. The price of HP's new scanner isn't a misprint: the Scanjet N7710 is squarely aimed at businesses looking for a fast and easy way to digitise large numbers of documents. The N7710 isn't very attractive, but it's compact and has an automatic document feeder (ADF), which can handle up to 50 A4 sheets. It can scan both sides of an A4 sheet at the same time, thanks to a pair of imaging units, and a double-feed detector does a reasonable job of separating and re-scanning the rare pages that are drawn in simultaneously.

There's no flatbed, though, so pages from books can't be scanned, and neither can film. A dedicated card feed slot means that identity and business cards can be scanned, but trying to put business cards through the normal sheet feed just resulted in paper jams. Despite the price, there's only a USB interface, so you'll have to connect the N7710 to a local PC rather than making it available directly on your network. While images can be scanned, the resolution is limited to a relatively low 600dpi.

Given the price, we were expecting great performance, and the HP didn't disappoint here. We scanned 10-page colour and mono documents at 150dpi, 300dpi, and 600dpi. Predictably, we saw the fastest speeds in our 150dpi mono test, in which all 10 pages were scanned in just

22 seconds, averaging 27ppm. 300dpi scans took just a few seconds longer, while 600dpi colour produced images good enough for high-quality archival. We had to wait a bit longer, but scans were still performed at a very reasonable 8ppm for mono and 5ppm in colour.

There are just six buttons to launch driver presets, cancel jobs, open configuration windows and scan directly to a printer. You can select from up to 30 profiles, with 11 presets including mono and greyscale scans to PDF, colour scans to TIFF, and optical character recognition (OCR) to an RTF document. The initial presets were limited, but it was easy to create additional profiles using HP's Smart Document Scan software. Every detail can be configured, from resolution to file format and naming patterns. The only way to identify what each of the scanner's numbered profiles did was by printing them out and sticking this list to a plastic tab that pulls down from the scanner's body. Other options include page straightening and colour drop-out functions that allow you to specify a colour to be ignored in scanned documents.

The Smart Document Scan software also lets you re-order pages after scanning and add additional pages to the same job.

Kofax's Virtual ReScan (VRS) software is incorporated into the driver. VRS can intelligently remove dark backgrounds from mono scans to make text more legible. Also included are IRIS's ReadIris PRO 11 OCR package



and Nuance's ScanSoft PaperPort 11. PaperPort can use OCR to create an index file of the document's text. Unfortunately, this is time-consuming and the document itself is never made fully searchable. We found it annoying to use, exacerbated by disabled options that prompt a message inviting you to buy PaperPort Professional.

The Scanjet N7710 is a fast and efficient way to enter documents into a management system, but it isn't without its flaws. Installation was more difficult than it should have been, with several different programs to install and register in the correct order before everything worked properly. Its ability to transform a bulky document into a legible, neatly aligned PDF in a matter of seconds is convenient. However, while it can scan up to 1,500 double-sided pages per day, £580 including VAT is a hefty amount of money to spend on any scanner.

Kat Orphanides

## SUMMARY

- ✓ Fast, accurate scans
- ✓ Excellent interface
- ✗ Some poor third-party software

**A4 SHEET-FEED DOCUMENT SCANNER**  
600x600dpi optical resolution, 24-bit colour output, USB Hi-Speed interface  
PART CODE L1989A  
DETAILS [www.hp.co.uk](http://www.hp.co.uk)

**PERFORMANCE** (see [www.computershopper.co.uk/howwetest](http://www.computershopper.co.uk/howwetest))

Colour scan speed: -50% Reference +50% +100%

CANON  
PIXMA iP4300

★★★★★

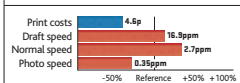
£56 inc VAT

From [www.ebuyer.com](http://www.ebuyer.com)

If you need a budget printer, Canon's PIXMA

iP4300 shows that you don't need to compromise on quality. It has two paper trays and can print on coated CDs or both sides of each sheet of paper. It's fast to produce text, colour graphics and photos. Print quality is high, with no trace of graininess, though photos are a bit oversaturated. Best of all, it has very low running costs.

**INKJET PRINTER** Five-colour inkjet, 9,600x2,400dpi maximum resolution, USB and PictBridge USB interfaces  
PART CODE 1438B008AA  
DETAILS [www.canon.co.uk](http://www.canon.co.uk)  
FULL REVIEW Dec 2007

HP  
Color LaserJet 3600

★★★★★

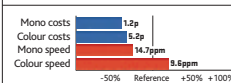
£248 inc VAT

From [www.printerland.co.uk](http://www.printerland.co.uk)

This is a fast USB laser printer with excellent print quality. The only consumable is the toner

cartridges, which incorporate the drum. These are economical if you buy high-yield versions, and the device comes with 6,000 mono and 4,000 colour pages' worth of toner. Print speeds were quick at 14.7ppm mono and 9.6ppm colour, and we were impressed by sharp mono text and accurate colour prints.

**HOME/SMALL OFFICE COLOUR LASER** 600x600dpi, 17ppm mono/17ppm colour, USB Hi-Speed interface  
PART CODE Q5986A  
DETAILS [www.hp.co.uk](http://www.hp.co.uk)  
FULL REVIEW Feb 2008

TALLY GENICOM  
8108N Colour Laser Printer

★★★★★

£107 inc VAT

From [www.it247.co.uk](http://www.it247.co.uk)

Tally Genicom's 8108N is the cheapest colour laser printer we've ever reviewed. Sharp mono text prints

were produced at a phenomenal 25.4ppm. Colour prints were slower (at 5.7ppm) and cost an expensive 9.6p per page, but we were impressed by their quality. The 8108N has both network and USB ports, making it an ideal budget choice for a home or small office, despite its non-replaceable drum.

**HOME/SMALL OFFICE COLOUR LASER** 600x600dpi, 31ppm mono/8ppm colour, USB Hi-Speed 10/100 Ethernet interfaces  
PART CODE 043792  
DETAILS [www.tallygenicom.co.uk](http://www.tallygenicom.co.uk)  
FULL REVIEW Feb 2008

